AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 10/567,461

Attorney Docket No.: Q93093

**REMARKS** 

This Amendment is filed in response to the final Office Action dated May 14, 2008, and

is respectfully submitted to be fully responsive to the rejections raised therein. Accordingly,

favorable reconsideration on the merits and allowance are respectfully requested.

In the Office Action of May 14, 2008, it is, first of all, appreciated that the Examiner has

withdrawn the earlier objection to the Abstract and all of the earlier prior art rejections of the

claims. However, the Examiner has newly rejected claim 2 (as amended February 29, 2008)

under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential steps; and

claims 1 and 2 was newly rejected under 35 U.S.C. § 103(a) based on Teichmann in view of

either Kanzler or Krulik, and claim 3 was newly rejected under § 103(a) based on the same

references further in view of Khanna.

In the present Amendment, claim 1 has been amended to specifically recite that the

reducing agent is ammonium sulfite. Support for this amendment can be found in the

specification, for example, on page 9, paragraph [0025].

Claim 2 has been amended to including a more detailed recitation of method steps and to

recite that the reducing agent is ammonium sulfite. Support for this amendment can be found in

original claim 2 and in the specification, for example, in paragraph [0025] at page 9 and in

paragraph [0008] bridging pages 3-4. No new matter has been added. Entry of the Amendment

is respectfully submitted to be proper. Upon entry of the Amendment, claims 1-3 will be all the

claims pending in the application.

Below, Applicant explains in further detail why the new rejections first set forth in the

final Office Action should not be withdrawn and the claims allowed.

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## I. Response to Rejection Under 35 U.S.C. § 112

Claim 2 was rejected under 35 U.S.C. § 112, second paragraph as assertedly being indefinite.

Applicant respectfully requests that the rejection of claim 2 be withdrawn in view of the Claim 2, as amended, recites the method of producing the amendment to claim 2. electroconductive fine particle according to claim 1 wherein the method allows a reducing agent, causing oxidation reaction on the surface of a nickel undercoating but not causing oxidation reaction on the surface of gold as deposited metal, to be present on the surface of the nickel undercoating which thereby reduces a gold salt to deposit gold, wherein the reducing agent is ammonium sulfite. Therefore, Applicant respectfully submits that claim 2 now fully complies with the requirements of 35 U.S.C. § 112, second paragraph, and requests that the rejection of claim 2 be withdrawn.

## II. Response to Rejection of Claims 1 and 2 Under 35 U.S.C. § 103(a)

Claims 1 and 2 were rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over U.S. Patent 4,711,814 ("Teichmann") in view of either U.S. Patent 6,776,828 ("Kanzler") or U.S. Patent 5,318,621 ("Krulik").

Applicant respectfully traverses and requests that the rejection be withdrawn in view of the amendments to the claims and further in view of these remarks.

An important technical feature of the presently claimed invention is that ammonium sulfite is used as a reducing agent in the process of producing a gold coating by electroless gold plating. The reducing agent causes an oxidation reaction on the surface of a nickel undercoating, but does not cause an oxidation reaction on the surface of gold as a deposited metal. Therefore,

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when the reducing agent is present on the surface of the nickel undercoating, it thereby reduces

sodium chloroaurate to deposit gold. A site plated once with gold is not further plated with gold,

so the electroconductive fine particles having a very even gold coating of constant thickness can

be obtained.

On the other hand, Teichmann does not disclose teach or suggest a method of producing

an electroconductive fine particle with a reducing agent. Kanzler discloses an electroless gold

plating method using a gold plating composition comprising a thiosulfate salt as a gold

complexing agent. However, the thiosulfate salt as described in Kanzler is completely different

from ammonium sulfite used in the presently claimed invention. Krulik discloses an electroless

gold plating bath using thiosulfate and sulfite salts. Krulik does not disclose, teach or suggest

that ammonium sulfite may be used as a sulfite salt. For instance, in Examples 1-26 of Krulik,

sodium sulfite is used as the sulfite salt.

Furthermore, Krulik refers to pending U.S. Applications directed to electroless gold

plating baths based on a combination of thiosulfate and sulfite salts. (See Krulik at col. 2, lines

30-37). According to Krulik, "these plating baths contain no ammonia or cyanide ions ..." (See

Krulik at col. 2, lines 39-40). For the above-mentioned reasons, it is apparent that Krulik

affirmatively excludes ammonium sulfite from sulfite salts that may be used therein.

In sum, none of the cited references describe, teach or suggest the use of the ammonium

sulfite as a reducing agent that is recited in claims 1 and 2. Consequently, the presently claimed

invention as recited in claims 1 and 2 is clearly not rendered obvious over Teichmann in view of

Kanzler or Krulik. Accordingly, withdrawal of this rejection is respectfully requested.

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III. Response to Rejection of Claim 3 under 35 U.S.C. § 103(a)

Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Teichmann in

view of either Kanzler or Krulik and further in view of U.S. Patent 6,838,022 ("Khanna").

Khanna does not overcome the deficiency of the other 3 references, and since claim 3 depends

from claim 1, Applicant respectfully submits that claim 3 is therefore patentable over the art for

at least the reasons mentioned with respect to patentability of claim 1. Thus, the withdrawal of

the rejection of claim 3 is respectfully requested.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited.

If any points remain in issue which the Examiner feels may be best resolved through a

personal or telephone interview, the Examiner is kindly requested to contact the undersigned

attorney at the local Washington D.C. telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON OFFICE

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CUSTOMER NUMBER

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